

Remarks

The Office Action mailed June 19, 2007, and made final, has been carefully reviewed and the foregoing amendment has been made in consequence thereof.

Applicant believes that no extension of term is required and that no additional fee for claims is required. If any additional fee is required for an extension of term or claims, the Commissioner is hereby authorized to charge Deposit Account No. 01-2384.

Claims 1-3, and 5-25 are now pending in this application. Claims 1-25 stand rejected. Claim 4 has been canceled.

The rejection of Claims 1-12, 14-20, and 22-24 under 35 U.S.C. § 102(b) as being anticipated by George et al. (U.S. Patent No. 5,978,648) is respectfully traversed.

The presently pending application is directed at helping teachers with the process of developing instructional lessons they will execute for the teaching and preparation of students for assessment, whereas George et al. is directed to assessment of the student utilizing set individual tasks.

More specifically, George et al. describe an educational system and process for an interactive multi media performance assessment tool which assists a student in the preparation of multi-media presentations which are demonstrative of classroom learning while also permitting teachers and administrators to link curriculum goals to instruction, assessment and student performance. See Column 1, line 67 to Column 2, line 6.

At Column 5, lines 50 -60 and Column 6, lines 48-58, George et al. describe a screen 23 that shows an instructional task planner for viewing and maintaining tasks for an academic year for a given date, week or month by a grade or subject. Included in the screen 23 is a calendar portion 25 and a task list portion 27. The screen also includes day, week and month indicators 29, add, modify and delete buttons 31 and grade, subject, title and show all buttons 33 and further shows an icon button 35 for viewing the goals status screen 24 for a specific day.

A performance task template screen 42 includes a summative assessment presentation which incorporates a student grade entry 44, a subject entry 46, an assignment start date 48, an assignment end date 50, a task status entry 52 and an assessment purpose entry 54. Among the linked items is a state standards icon 55, a district goals icon 56, a course goals icon 58, exemplars 60 and rubrics 62. Listed under teachers resources are a lesson plan icon 64, a related curriculum areas icon 66, a previously taught icon 68, a student list 70 and a feedback to students icon 72. Listed under student resources is a student activity icon 74, a reference material icon 76, a performance criteria icon 78 and a benefits icon 80.

Generally speaking, the student activities described by George et al. are tasks. Nowhere do George et al. identify essential dimensions for teaching and learning, that is, key facts (what the student is to know) skill objectives (what the student is to do), and key concepts (what the student is to understand). Using the example in George et al., and also referring to Figure 4 of George et al., the student activity states: “Create a new feature that includes all of the events.” This activity does not identify the key concepts. Rather, it is a specific activity to help develop the skill. Therefore George et al. do not identify the underlying processes for creating the activity, but instead provide a list of student activities and performance criteria. George et al. simply do not identify the underlying processes and integrating concepts for conceptual understanding (e.g., the key concepts) as is done in the pending claims. Generally, the pending claims focus on an instructional curriculum format that supports a hierarch of conceptual development.

In summary, George et al. describe a standardized teaching/testing tool, which is sometimes referred to as a rubrics building assessment tool, which is utilized by students, teachers and administrators. See Figure 6 of George et al. In other words, George et al. consists of a selection of student tasks and assessments. It is not a planner for teacher instruction that focuses on the identification and classification of how knowledge is structured (e.g., to know, to understand, and to do). Rather, in the embodiments described in George et al., the teacher is given a student activity (i.e., George et al. is task-based with no indication to the underlying concepts and processes for understanding that are meant to be achieved through completion of the activity. In other words, George et al. provide a plethora of objectives, verbs followed by a

topic or concept, that only assumes that teaching will reach conceptual understanding. George et al. do not address the articulation of focused concepts and ideas. Generally, George et al. describe an individualized student program that calls on the teacher to select and match with predetermined tasks.

Additionally, at Column 6, lines 13-19, George et al. indicate that a listing of academic subjects may include “interdisciplinary projects”. This is the only place in the George et al. patent that the word “interdisciplinary” appears. Applicant submits that an academic subject of “interdisciplinary projects” is not equivalent to interdisciplinary connections or shared discipline concepts as utilized in the presently pending application.

However, the present application is directed to a curriculum planning tool, which guides the teacher in developing instructional practices (the art of teaching which includes differentiation to accommodate varied learning styles – Figure 4) and assessments that address key concepts and processes for conceptual development and understanding. By guiding the teacher through the process of developing multiple cognitive processing strategies in teaching and assessment, alignment with standards is achieved. In other words, the teacher is taught how to plan and create lessons of instruction that guide students to understanding concepts, principles, and generalizations, using the provided standards. George et al. do not mention teacher instructional practices, or referring to the language of the pending claims, George et al. do not describe the development of instructional activities.

To that end, Claim 1 recites a method for curriculum planning using a curriculum planning tool. The method includes “selecting a grade level, an academic discipline, and a course within the academic discipline”, “entering local objectives to be met by the selected course”, “aligning the local objectives with one or more standards”, “mapping the selections, local objectives, and standards into one or more key concepts that support interdisciplinary connections and promote conceptual development through integration of shared concepts across the curriculum”, “developing instructional activities for the selected course that teach key concepts, processes, and critical content through a guided format that includes prior knowledge, preparation, presentation, and practice/process and supports different ability levels” and

“assessing the curriculum against the standards using criterion-reference assessments that are aligned with a learning process complexity and based on instructional activities.”

George et al. do not describe, nor suggest, a method for curriculum planning that includes developing instructional activities for the selected course that teach key concepts, processes, and critical content through a guided format that includes prior knowledge, preparation, presentation, and practice/process and supports different ability levels, nor the integration of shared concepts across a curriculum. Rather, George et al. simply describe a performance task template that includes a summative assessment presentation. The presentation incorporates items such as a student grade entry, a subject entry, an assessment purpose entry and linked items such as a state standards icon, a district goals icon, a course goals icon, exemplars, rubrics, and a related curriculum areas icon. There is no mention in George et al. of planning or developing instructional activities for the selected course that teach concepts, processes, and critical content through integration of shared discipline concepts across the curriculum. In other words, George et al. focused on the end of instruction, and do not address the beginning of instruction to determine readiness for learning (prior knowledge), the planning (teacher preparation), and during instruction (presentation, practice/process) to guide student learning. The goal-based system of George et al. is focused simply on course content, while the presently claimed method also includes recitations directed toward the planning of content as found in the mapping and developing steps of Claim 1.

Further, Applicant notes the following at page 6 of the Final Office Action, “information including district and school goals that are assigned to the task, rubrics and exemplars linked to the task, and procedural criteria and evaluative criteria. Accordingly, George teaches a method of planning and developing instructional activities that teach key concepts, processes and critical content. Applicant respectfully disagrees. George et al. do not disclose development of instructional activities to teach concepts, processes, and content. The relevant portion of George et al. simply describes an assessment tool that allows a user to evaluate a progress against district and/or school goals assigned to a task. The selection of academic subjects and ability to illustrate an assignment for a selected subject and its associated tasks (see Column 6, lines 18-21) is not equivalent to development of instructional activities as is recited in Claim 1. In summary,

there is no instructional activity development disclosed by George et al., only selection of pre-defined activities(or tasks), which the student eventually performs, the performance being assessed against stored goals (district and school) and rubrics.

For the reasons set forth above, Claim 1 is submitted to be patentable over George et al.

Claims 2-12, 14, and 15 depend, directly or indirectly, from independent Claim 1. When the recitations of Claims 2-12, 14, and 15 are considered in combination with the recitations of Claim 1, Applicant submits that dependent Claims 2-12, 14, and 15 likewise are patentable over George et al.

In addition to the reasons given above, certain of Claims 2-12, 14, and 15 are further addressed and also submitted to be patentable for reasons given below.

Referring specifically to Claim 2, in addition to the recitations of Claim 1, Claim 2 recites “selecting discipline specific processes that are organized by learning process complexity” and “selecting a critical content and vocabulary for the discipline specific processes as identified in a scope and sequence for the discipline aligned with the national standards.” George et al. do not describe or suggest these steps. Rather, and referring to Figures 3 and 4, George et al. simply give the teachers the behavioral objectives of the final product. No selection of discipline specific processes, and critical content is described.

Claim 3 includes the recitation “wherein mapping the selections, local objectives, and standards into one or more key concepts comprises supporting a conceptual framework that incorporates a hierarchy of conceptual development for the conceptual process”. George et al. only describe folders that have nothing to do with mapping or framing key concepts. Referring to Figure 3, these folders simply contain samples of possible activities in Social Studies. While George et al. list topics of “National Issue”, “Negotiations Task(s)”, and a “Novel Task”. George et al. do not guide the teacher in developing instruction and assessments that addresses key concepts and processes for conceptual development and understanding. They simply give the teacher a student activity to do, with no indication or alignment to the underlying concepts and processes for understanding.

Claim 5 recites “developing a framework for sequential strategies based on learning process complexity”. George et al. simply illustrate grade levels, labeled yearly stages in schools, not the cognitive learning process complexity of sequential strategies.

In regard to Claim 6, George et al. simply do not address processes, sequential complexity, concept development, and interdisciplinary connections. Rather, George et al. only identify activities. In contrast and for example, interdisciplinary connection is the act of drawing from two or more academic disciplines and integrating their (ideas/concepts/processes) to work together in pursuit of interdisciplinary perspectives that give breadth and depth to conceptual understanding and learning.

Claim 9 recites “aligning the assessment with the key concepts and state discipline-specific grade-level expectations”. George et al. do not align the assessments with the key concepts, because George et al. do not prompt the teacher to identify the key concepts. Rather, George et al. basically ask a teacher to create their assessment prompt and to then match it with various goals. This is not alignment, as utilized in the presently pending application. Rather, George et al. describe finding the best match between a goal and an assessment.

For all of the reasons set forth above, Applicant submits that these claims, as well as the other claims that depend from Claim 1, are patentable over George et al.

Independent Claim 16 recites a computer for curriculum assessment that is programmed to “accept input data relating to grade level selection, academic discipline selection, course selection within the academic discipline, and local objectives to be met by the selected course”, “align the local objectives with discipline specific grade level objectives and one or more standards”, “map critical content and process level input data with one or more integrated, shared discipline concepts to be taught and the standards”, “accept input data relating to instructional activities, that are developed by using a guided format outlining prior knowledge, preparation, presentation, and practice/process and supporting different ability levels, developed by the user, for teaching the concepts” and “assess the curriculum against the standards based on the instructional activities.”

George et al. do not describe, nor suggest, a computer for curriculum assessment that is programmed to map critical content and process level input data with one or more integrated, shared discipline concepts to be taught and one or more standards and accept input data relating to instructional activities, that are developed by using a guided format outlining prior knowledge, preparation, presentation, and practice/process and supporting different ability levels, developed by the user, for teaching the concepts. Rather, and as described above, George et al. simply identify goals for assessment. More specifically, George et al. simply describe a performance task template that includes a summative assessment presentation. The presentation incorporates items such as a student grade entry, a subject entry, an assessment purpose entry and linked items such as a state standards icon, a district goals icon, a course goals icon, exemplars, rubrics, and a related curriculum areas icon. There is no mention in George et al. relating to the mapping of content and processing of input data with one or more integrated, shared discipline concepts. Additionally, there is no mention of instructional activity development and the support of different ability levels. The goal-based system of George et al. is focused simply on assessment based on a predefined course content, while Claim 16 includes recitations directed to development of instructional activities relating to the shared discipline concepts to be taught.

For the reasons set forth above, Claim 16 is submitted to be patentable over George et al.

Claims 17-20 depend, directly or indirectly, from independent Claim 16. When the recitations of Claims 17-20 are considered in combination with the recitations of Claim 16, Applicant submits that dependent Claims 17-20 likewise are patentable over George et al.

Referring specifically to Claim 17, George et al. do not describe, nor suggest, a computer programmed to accept input data relating to selection of a standard and generate a report illustrating which of the instructional activities apply to the selected standard. Rather, George et al. simply describe, with reference to FIG. 2b, a screen 24 that illustrates a plurality of individual portions for showing such things as goals in progress portion 37, goals planned portion 39 and goals met portion 41 for a given grade and/or subject on a given date in an academic year. A selection bar 41' is shown along a bottom of the screen 24 and permits a teacher or administrator to select a given date for viewing the contents of the screen 24. While George et al. do describe

a computer programmed to accept input data (goals planned, in progress, met, etc.), an illustration of which instructional activities apply to a selected standard is not shown by George et al.

Independent Claim 22 recites a method for mapping a curriculum according to concepts utilizing a curriculum mapping tool. The method includes “choosing a grade level, a topic, and a concept”, “selecting an academic discipline and a course within the discipline to be used for teaching the concept”, “selecting a discipline-specific subtopic”, “choosing at least one of a discipline concept and a discipline process”, “generating at least one of a concept map of information and a process map action, based upon said choice of discipline process and discipline concept” and “developing instructional activities through a guided format that includes prior knowledge, preparation, presentation, and practice/process and supports different ability levels for the course which align with the concept.”

George et al. do not describe, nor suggest, a method for mapping a curriculum according to concepts. More specifically, George et al. do not describe developing instructional activities through a guided format that includes prior knowledge, preparation, presentation, and practice/process and supports different ability levels for the course which align with the concept. Rather, and as described above, George et al. simply identify goals for assessment. More specifically, George et al. simply describe a performance task template that includes a summative assessment presentation. The presentation incorporates items such as a student grade entry, a subject entry, an assessment purpose entry and linked items such as a state standards icon, a district goals icon, a course goals icon, exemplars, rubrics, and a related curriculum areas icon. There is no mention in George et al. relating to the development of instructional activities. The goal-based system of George et al. is focused simply on assessment based on predefined course content. Additionally, there is no discussion in George et al. that can be reasonably construed as curriculum mapping based on concepts. The goal-based system of George et al. is focused simply on course content, while the presently claimed method also includes mapping a curriculum according to concepts.

For the reasons set forth above, Claim 22 is submitted to be patentable over George et al.

Claims 23 and 24 depend, directly or indirectly, from independent Claim 22. When the recitations of Claims 23 and 24 are considered in combination with the recitations of Claim 22, Applicant submits that dependent Claims 23 and 24 likewise are patentable over George et al.

For the reasons set forth above, Applicant respectfully requests that the Section 102 rejection of Claims 1-12, 14-20, and 22-24 be withdrawn.

The rejection of Claims 13, 21, and 25 under 35 U.S.C. § 103 as being unpatentable over George et al. in view of Pellegrino et al. (U.S. Patent No. 6,149,441) is respectfully traversed.

George et al. is described above. Pellegrino et al. describe a computer-based educational system for use by teacher and student users and including a server computer and at least one client computer having a display and user input device. A lesson builder allows teachers to create customized lessons incorporating lesson material that includes text, audio, images, video and application programs into a lesson for delivery to the student user. Lesson material can be drawn from a variety of sources, including a lesson material data base, a database of existing lessons, and the Internet. At Column 17, lines 55-60, it is inferred that lesson plan components are related to career opportunities.

Claim 13 depends from Claim 1 which recites a method for curriculum planning using a curriculum planning tool. The method includes “selecting a grade level, an academic discipline, and a course within the academic discipline”, “entering local objectives to be met by the selected course”, “aligning the local objectives with one or more standards”, “mapping the selections, local objectives, and standards into one or more key concepts that support interdisciplinary connections and promote conceptual development through integration of shared discipline concepts”, “developing instructional activities for the selected course that teach key concepts, processes, and critical content through a guided format that includes prior knowledge, preparation, presentation, and practice/process and supports different ability levels” and “assessing the curriculum against the standards using criterion-reference assessments that are aligned with a learning process complexity and based on instructional activities.”

George et al. in view of Pellegrino et al. do not describe, nor suggest, such a method. As explained above, George et al. do not describe, nor suggest, a method for curriculum planning that includes mapping the selections, local objectives, and standards into one or more key concepts that support interdisciplinary connections and promote conceptual development through integration of shared discipline concepts. George et al. do not mention teacher instructional practices, or referring to the language of the pending claims, George et al. do not describe the development of instructional activities.

George et al. do not describe, nor suggest, a method for curriculum planning that includes developing instructional activities for the selected course that teach key concepts, processes, and critical content through a guided format that includes prior knowledge, preparation, presentation, and practice/process and supports different ability levels and through integration of shared concepts across a curriculum. Rather, George et al. simply describe a performance task template that includes a summative assessment presentation. The presentation incorporates items such as a student grade entry, a subject entry, an assessment purpose entry and linked items such as a state standards icon, a district goals icon, a course goals icon, exemplars, rubrics, and a related curriculum areas icon. There is no mention in George et al. of planning or developing instructional activities for the selected course that teach concepts, processes, and critical content through integration of shared discipline concepts across the curriculum. The goal-based system of George et al. is focused simply on course content, while the presently claimed method also includes recitations directed toward the planning of content as found in the mapping and developing steps of Claim 1. Pellegrino et al. describe computer-based educational system where lesson plan components are shown to be related to specific career opportunities. George et al. in view of Pellegrino et al. do not describe, nor suggest, the method recited in Claim 1.

For the reasons set forth above, Claim 1 is submitted to be patentable over George et al. in view of Pellegrino et al.

Claim 13 depends from independent Claim 1. When the recitations of Claim 13 are considered in combination with the recitations of Claim 1, Applicant submits that dependent Claim 13 likewise is patentable over George et al. in view of Pellegrino et al.

Claim 21 depends from Claim 16 which recites a computer for curriculum assessment that is programmed to “accept input data relating to grade level selection, academic discipline selection, course selection within the academic discipline, and local objectives to be met by the selected course”, “align the local objectives with discipline specific grade level objectives and one or more standards”, “map critical content and process level input data with one or more integrated, shared discipline concepts to be taught and the standards”, “accept input data relating to instructional activities that are developed by using a guided format outlining prior knowledge, preparation, presentation, and practice/process and supporting different ability levels, developed by the user, for teaching the concepts” and “assess the curriculum against the standards based on the instructional activities.”

George et al. in view of Pellegrino et al. do not describe, nor suggest, a computer for curriculum assessment that is programmed to map critical content and process level input data with one or more integrated, shared discipline concepts to be taught and one or more standards and accept input data relating to instructional activities, developed by the user, for teaching the concepts. Rather, and as described above, George et al. simply identify goals for assessment. More specifically, George et al. simply describe a performance task template that includes a summative assessment presentation. The presentation incorporates items such as a student grade entry, a subject entry, an assessment purpose entry and linked items such as a state standards icon, a district goals icon, a course goals icon, exemplars, rubrics, and a related curriculum areas icon. There is no mention in George et al. relating to the mapping of content and processing of input data with one or more integrated, shared discipline concepts. Additionally, there is no mention of instructional activity development. The goal-based system of George et al. is focused simply on assessment based on a predefined course content, while Claim 16 includes recitations directed to development of instructional activities relating to the shared discipline concepts to be taught. Pellegrino et al. describe computer-based educational system where lesson plan components are shown to be related to specific career opportunities.

For the reasons set forth above, Claim 16 is submitted to be patentable over George et al. in view of Pellegrino et al.

Claim 21 depends from independent Claim 16. When the recitations of Claim 21 are considered in combination with the recitations of Claim 16, Applicant submits that dependent Claim 21 likewise is patentable over George et al. in view of Pellegrino et al.

Claim 25 depends from Claim 22 which recites a method for mapping a curriculum according to concepts utilizing a curriculum mapping tool. The method includes “choosing a grade level, a topic, and a concept”, “selecting an academic discipline and a course within the discipline to be used for teaching the concept”, “selecting a discipline-specific subtopic”, “choosing at least one of a discipline concept and a discipline process”, “generating at least one of a concept map of information and a process map action, based upon said choice of discipline process and discipline concept” and “developing instructional activities for the course by using a guided format outlining prior knowledge, preparation, presentation, practice process and supported by strategies for varied learning styles, complex problem solving, and structure of knowledge for the course which align with the concept.”

George et al. in view of Pellegrino et al. do not describe, nor suggest, such a method. As explained above, a method for mapping a curriculum according to concepts. More specifically, George et al. do not describe developing instructional activities for the course which align with the concept. Rather, and as described above, George et al. simply identify goals for assessment. More specifically, George et al. simply describe a performance task template that includes a summative assessment presentation. The presentation incorporates items such as a student grade entry, a subject entry, an assessment purpose entry and linked items such as a state standards icon, a district goals icon, a course goals icon, exemplars, rubrics, and a related curriculum areas icon. There is no mention in George et al. relating to the development of instructional activities. The goal-based system of George et al. is focused simply on assessment based on a predefined course content. Additionally, there is no discussion in George et al. that can be reasonably construed as curriculum mapping based on concepts. The goal-based system of George et al. is focused simply on course content, while the presently claimed method also includes mapping a curriculum according to concepts. Pellegrino et al. describe computer-based educational system where lesson plan components are shown to be related to specific career opportunities. George et al. in view of Pellegrino et al. do not describe, nor suggest, the method recited in Claim 22.

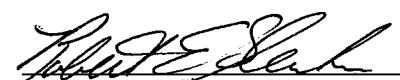
For the reasons set forth above, Claim 22 is submitted to be patentable over George et al. in view of Pellegrino et al.

Claim 25 depends from independent Claim 22. When the recitations of Claim 25 are considered in combination with the recitations of Claim 22, Applicant submits that dependent Claim 25 likewise is patentable over George et al. in view of Pellegrino et al.

For the reasons set forth above, Applicants respectfully request that the Section 103 rejection of Claims 13, 21, and 25 be withdrawn.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,



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